

agreement and consent between the two parts of Ireland we must create greater unity within the NI community.

"In our 1981 conference statement and in Labor's program 1982, we set out in full Labor's policy on NI. We will aim to establish an agreed devolved administration. In the meantime we will continue with direct rule. We will also initiate early discussions between the British Government, the Irish Government, the Irish Labor Party and trade unions on both sides of the Border, and political representatives of the people on NI on how best to proceed with our policy of unification by consent.

"Tory policies have been a disaster for the NI economy. Unemployment has soared. The economy is in ruins. Housing and the social services are in desperate straits. Labor will give new hope to NI. We will create jobs and provide investment. We will use all of the economic planning powers and institutions set out in this document, together with a massive injection of public resources, to rebuild the economy.

"We will also act on security and civil rights along the lines set out in our 1981 statement. We will repeal the Prevention of Terrorism Act and the Payment of Debt Act, and reform the system of Diplock courts. We will provide equal rights for women, including the right to abortion, and make progress towards an integrated comprehensive system of education."

ACTIVITIES AT NASA

HON. DANIEL K. AKAKA

OF HAWAII

IN THE HOUSE OF REPRESENTATIVES

Tuesday, May 3, 1983

● **Mr. AKAKA.** Mr. Speaker, on April 27, 1983, the Administrator of NASA, Mr. James M. Beggs, gave an address to the National Space Club. This speech contains an overview of NASA's activities over the past year, as well as a look at what the future holds for our space agency. Every member of this body should read the text of Mr. Beggs' remarks to the National Space Club. I therefore include the text of Mr. Beggs' speech in the RECORD immediately following my remarks.

REMARKS: NATIONAL SPACE CLUB,
WASHINGTON, D.C., APRIL 27, 1983

(By James M. Beggs, NASA Administrator)

I am delighted to be here this afternoon.

I must admit, though, that I had second thoughts about accepting Chuck Tringali's invitation. The reason is that today is exactly 15 months to the day since we last met. And any public official worth his salt knows that it is the better part of valor not to come back to speak before the same organization unless and until a decent interval has elapsed—say, two or three years. In that way you don't have to write a new speech!

Today, however, I welcome the opportunity, since I didn't get to say everything I wanted to last time. And so, to paraphrase Shakespeare's Lear, I will "mend my speech a little, lest it may mar my fortunes."

I thought you might be interested in a brief progress report on NASA's activities over the past year and where we hope to be going the rest of this year and in fiscal 1984.

The year 1982 was indeed a turning point in building America's future in space. It was a year in which the American people began to understand the real potential of space. It

was a year that space emerged as not merely a place for people to visit, but, rather, as a frontier for extensive human activity on many fronts.

With each successful Shuttle flight, there has come increased public understanding that space is an extension of our environment—a place where we can pursue scientific research, commerce and industry, expand knowledge, strengthen our national security and yes, even have fun.

There were some extraordinary achievements for this nation in both space and aeronautics during 1982 and I will highlight them in a moment. But first I think it important to recall that President Reagan underlined his strong commitment to what NASA does in two significant policy statements last year on space and aeronautics.

Both statements emphasized the President's renewed commitment to a strong national space and aeronautics program. Inherent in both are two major principles consistent with NASA's Congressional mandate. The first is our obligation to help strengthen the national security. The second is the need to maintain United States leadership in space and aeronautical technology by continuing to foster innovation, creativity, public-private sector cooperation and international cooperation.

Last year we flew three successful Space Shuttle missions. The last of them, in November, marked the Shuttle's entry into operational service. On this fifth Shuttle flight we launched two commercial communications satellites and made the transition from orbital flight tests to flying payloads for hire.

The success of the electrophoresis experiment flown on the Columbia's fourth mission is, I think, one of the most important events of the year. It heralds a new era of commercial pharmaceutical processing in space. The equipment performed with a high degree of efficiency and much better than expected in near-zero gravity. It produced material much purer and in much greater quantity than on earth.

Indeed, so pleased were McDonnell Douglas and Johnson and Johnson, who invested heavily in this experiment, that they may well be operating a for-profit electrophoresis manufacturing facility in orbit as early as the late 1980s. Such a facility, of course, would be serviced and supplied by the Shuttle. It could produce serums, hormones, vaccines and a variety of other products, including interferon, which could alleviate or eliminate many dread diseases.

Small wonder, then, that we are proud of the Shuttle and of the opportunities it gives us to exploit the space environment.

American entrepreneurs, never known to shrink from potential profit, have been quick to see this potential. Some, I might add, have been quicker than others. But the year saw increasing expressions of interest from other commercial firms for venturing in the space environment for profit. A company proposed and is still trying to buy a Shuttle orbiter in exchange for commercial marketing rights. And others are looking at private ownership of expendable launch vehicles and operating them in competition with the Shuttle and other government-owned launch vehicles.

There were some other notable events of the year.

One of the most important was the establishment of the Space Telescope Science Institute at Johns Hopkins University in Baltimore. With the future launch of the Space Telescope, the institute, which will be formally opened next month, will become the world's primary center for space research, and probably remain so, for decades to come.

Two other important events come to mind.

One was the launch of Landsat-D, the first of a new generation of space systems capable of providing timely, accurate and reliable Earth resource data. Equipped with the new thematic mapper, the satellite transmits images of the earth's surface with three times the spatial resolution and four times the sensitivity to reflected light than the three previous Landsats. We are highly encouraged by the results and feel that this satellite will be a great boon to urban planners, geologists, crop surveyors, hydrologists and other earth resource scientists.

The second event is the delivery from Europe of the first of two Spacelabs to the Kennedy Space Center. The European Space Agency built this reusable orbiting scientific laboratory under a cooperative agreement with NASA. The Europeans' investment totaled more than \$1 billion.

We plan to launch Spacelab this September, as scheduled. In addition to its scientific importance, it is significant in other ways. It underlines the Europeans' confidence in the Shuttle's potential and their strong commitment to international cooperation in space.

The year 1982 was also one of considerable progress in aeronautics and towards our goal of making both civil and military aircraft safer, more energy-efficient, more economical and more environmentally acceptable.

The Highly Maneuverable Aircraft Technology program, or HIMAT, completed several major milestones during 1982. HIMAT provides valid advanced information on stability, control, aeroelasticity and maneuverability at transonic speeds. Data from the program will be extremely valuable to designers of future high-speed aircraft.

Another versatile new technology, embodied in our experimental tilt-rotor aircraft, stirred considerable interest in both the Defense Department and the private sector during the year.

All in all, not a bad year for NASA. What's on our platter for the rest of this year and into fiscal year 1984?

Well, we have already had a spectacular success: the January launch from an expendable launch vehicle of IRAS, the Infrared Astronomical Satellite. This observatory is performing magnificently. In fact, in only one minute of observation, shortly after it was launched, it taught us more about the Large Magellanic Cloud, the nearest galaxy to our own Milky Way, than in all our previous observations.

The Shuttle will be flying five times this year. The first mission, early this month, deployed the first Tracking and Data Relay Satellite, one of a series in a system that will provide a new space-borne and data relay link with the Shuttle and all NASA satellites.

We expect delivery of the third orbiter in September and completion of the fourth orbiter during Fiscal Year 1984. All in all, I think, we are moving closer to our goal of making the Shuttle system fully operational as quickly as possible and expanding its operational capabilities to the fullest.

Last month we launched our first Search and Rescue Satellite. This will be part of a world-wide system enabling us to pinpoint ships and aircraft in distress. Over the past year, a Soviet satellite of this type helped to save the lives of several people from sinking ships and aircraft crashes.

With Congressional approval in Fiscal Year 1984, we expect to have four initiatives which will stretch the scope of our program in science, applications and aeronautics.

The first is the initiation of hardware development for the Tethered Satellite System. This is a cooperative U.S.-Italian project designed to provide a new capability for conducting experiments in space at distances of up to 100 kilometers from the Shuttle orbiter.

The second is a plan to map the surface of Venus, using radar imaging techniques. The Venus Radar Mapper replaces, at a much lower cost, the Venus Orbiting Imaging Radar mission authorized by Congress in Fiscal Year 1982. We expect this new mission to Venus to provide valuable scientific insight into that planet's physical properties and processes and, in doing so, help us better to understand those of earth.

The third new activity we plan is a project known as the Advanced Communications Technology satellite. This involves the development and flight-testing of the high-risk technology needed to ensure continued United States preeminence in the field of satellite communications.

The fourth initiative—the Numerical Aerodynamic Simulation capability project—is the centerpiece of our proposed aeronautical research and technology program. The NAS is a large computer system to be developed over the next few years. It will have a major impact on aircraft design methods, by improving accuracy and reliability. At the same time, it will cut down on expensive wind tunnel and flight testing.

The President has proposed a NASA budget of just over \$7.1 billion for Fiscal Year 1984. That is just about eight-tenths of one percent of the total Federal budget. That has been our share of the pie for the past two years, at least, and we have not done too badly. But I have made no secret of the fact that I believe the NASA budget should be one percent of the total Federal budget, which would give us about \$8.5 billion in Fiscal Year 1984. That is about the right amount for an R&D agency charged with maintaining the preeminence of the United States in space and aeronautics. And we take that charge very seriously.

On the whole, though, I believe we will go into Fiscal Year 1984 in very good shape. With the new starts and the increased Shuttle flight rate, we expect to begin to reap the benefits of what we have achieved in finally reaching the end of the Space Shuttle development phase.

This is NASA's Silver Anniversary year. It will be a great year in space. And it is fitting, I think, that an unprecedented event should occur this year. Even though it will happen almost 3 billion miles from earth, it should lift our spirit and stir our imagination.

Just 47 days from today, on June 13, a man-made deep space probe will leave our solar system for the first time. It is called Pioneer 10, and was launched in March of 1972 to fly by Jupiter. Its journey to the farthest reaches of the universe, is symbolic, I think, of where mankind could be going if we continue to explore the wonders that await us at the edge of our understanding.

We can only imagine where we will be in space 25 years from now. But just as we couldn't conceive of where we would be today when we began this adventure 25 years ago, so a quarter century from now, when another NASA Administrator stands at this podium, he or she will speak of wonders, adventures and dreams that we cannot even envisage today.

And people will ask then, as they have in the past, in the words of Edward Arlington Robinson:

"Where was he going, this man against the sky? You know not, nor do I."

One thing I do know, however. We will have the answer only if we continue to

pursue the great adventure and magnificent dream that is space exploration.

As a great nation, we owe it to ourselves to do no less.

Thank you very much. ●

EXPORT ADMINISTRATION ACT AMENDMENTS

HON. ED ZSCHAU

OF CALIFORNIA

IN THE HOUSE OF REPRESENTATIVES

Tuesday, May 3, 1983

● Mr. ZSCHAU. Mr. Speaker, last week I was pleased to cosponsor H.R. 2761, the Export Administration Act Amendments of 1983, introduced by Congressman BONKER of Washington. H.R. 2761 contains proposed changes to the Export Administration Act which should help to increase our exports of high technology products while preventing transfer of our critical technologies to potential adversaries around the globe.

The Export Administration Act is the legislation that provides the President with the authority to restrict exports of products from the United States in order to achieve foreign policy objectives, protect our national security, or preserve our resources that are in short supply. Although H.R. 2761 deals with amendments to the current law in all three areas, I will confine my remarks here to export controls on technology and technical products for national security reasons.

My congressional district in northern California includes the area often referred to as "Silicon Valley." I have in my district about 700 electronics companies manufacturing high technology products. Most of these companies are subject to the Export Administration Act in the regular conduct of their business. Based on the experiences of these companies, as well as my personal experience as president of a small electronics manufacturing firm, I believe that the thrust of the revisions proposed in H.R. 2761 will improve the export performance of our high technology companies and, at the same time, focus the export control procedures on those items and activities that really should be controlled for national security reasons.

On the surface, the Export Administration Act appears to be dealing with a conflict between the objectives of greater exports of technology products and our national security. However, I submit that these two objectives are not necessarily in conflict. I know of no executives in high technology companies who wish to help the Soviet Union improve its military might. In fact, very little of our trade actually goes to the Soviet Union or Warsaw pact countries. However, it is most frustrating for U.S. exporters to lose business destined to friendly nations merely because their shipments are delayed by time-consuming licensing procedures while their foreign compet-

itors are able to respond quickly to customer requests with similar products.

Most export license applications are approved. It just takes time. Out of the more than 80,000 validated license applications made in 1982, less than 900—slightly more than 1 percent—were denied. This high approval ratio suggests that the licensing procedures can be streamlined and focused without increasing the risk of losing critical technology. In fact, streamlining the control procedures could enable the controls that are applied to be tighter and more effective.

H.R. 2761 has several provisions designed to streamline the licensing process and thereby permit greater attention to be focused on controlling truly critical technologies. Among them are:

Codifying licensing procedures currently written in regulations which substantially reduce the number of individual license applications that must be made. For example, the distribution license, which enables companies with a single license application to make repeated shipments to the same customer or distributor, would be authorized in the act.

Authorizing a new license, called the comprehensive operations license. This special license would exempt companies from separate licensing of exports to their own foreign subsidiaries so long as they maintain in their organizations certain control procedures.

Prohibiting the denial of a license application merely because a product contains a microprocessor.

Streamlining the export licensing procedure to our allies who have agreed to control the export of those technologies.

Defining more precisely and operationally the criteria under which a product or technology is judged to be available from other countries and, therefore, not subject to U.S. export controls.

Although I am proud to cosponsor H.R. 2761 because I believe its thrust is proper, I feel that it will be desirable to consider additional changes that will strengthen it further. For example, it might be desirable to amplify the congressional intent on the circumstances under which the comprehensive operations license or the distribution license could be used. Also, the criteria for foreign availability could be further clarified. Finally waiving the license requirement for exports to certain of our allies—referred to in the act as COCOM countries—should probably depend upon corresponding strengthening of our multilateral agreements with those countries regarding export controls.

It should be pointed out that there are also several important elements of the current act which have not yet been implemented. We still do not have a militarily critical technologic